



Contribution ID: 135

Type: Poster

Determining the Relationship of Atmospheric CO₂ Concentrations to Vehicular Traffic

Thursday, May 25, 2017 5:00 PM (15 minutes)

This research aims to investigate the relationship between atmospheric carbon dioxide (CO₂) concentrations, traffic count, vehicle type and meteorology at three study sites in Amphoe Muang Lampang in Thailand. Initial measurements were conducted since December 2016 from 2:00-4:00 PM. Since CO₂ concentrations also depend on biospheric processes (photosynthesis and respiration), the chosen measurement time period corresponded to stable CO₂ concentrations with a minimum amount of variability. This ensured that the measured CO₂ concentrations primarily come from traffic. Multiple regression analysis will then be utilized to determine which factors contribute significantly to the measured CO₂ emissions.

Authors: Ms CHUMPHUIN, Laksika (Lampang Rajabhat University); Ms FANKREA, Suthima (Lampang Rajabhat University); Prof. SONKAEW, Thiranan (Lampang Rajabhat University); Dr MACATANGAY, Ronald (National Astronomical Research Institute of Thailand)

Presenters: Ms CHUMPHUIN, Laksika (Lampang Rajabhat University); Ms FANKREA, Suthima (Lampang Rajabhat University)

Session Classification: Poster Presentation II

Track Classification: Environmental Physics, Atmospheric Physics, Geophysics and Renewable Energy